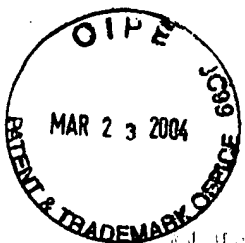


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AF/3724



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EXAMINING GROUP #3724
ATTORNEY DOCKET NO:63286RCE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : ARNETOLI
Serial No : 09/348,069
Filed : July 6, 1999
For : GRASS-CUTTING...
Art Unit : 3724
Examiner : C. Dexter
Dated : March 23, 2004

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

I. REAL PART IN INTEREST

This Application is assigned to Arnetoli Motor Di Arnetoli Fabrizio located at Via I
Ciliegi 25, Montanino, 50066 Reggello, Firenze, Italy.

RECEIVED

MAR 29 2004

TECHNOLOGY CENTER R3700

II. RELATED APPEALS AND INTERFERENCES

Appellant, Appellant's legal representative, or Assignee has no knowledge of any
appeals or interferences which will directly effect or be directly effected by or have a bearing
on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1 - 40 have been canceled. Claims 57 - 76 have been withdrawn from

consideration. Claims 41 - 56 and 77 - 80 stand rejected and are on appeal.

IV. STATUS OF AMENDMENT AFTER FINAL REJECTION

No Amendment After Final Rejection was filed.

V. SUMMARY OF THE INVENTION

The present invention is a grass cutting head often used in a handheld powered tool for trimming grass and weeds in small areas or rough terrain where a typical lawnmower would be impractical.

Fig. 1 shows a sectional view of the head where the housing 3 is connected to a hub 7. The hub 7 has a threaded portion 7a which is connected to the portable power tool. The whole head assembly in the embodiment of Fig. 1 is rotated by the power tool through the hub 7. Inside the housing 3 is a spool 5. The spool 5 holds the grass cutting line F in a wound matter, page 8 lines 3 - 4. A stop component 13 has a collar 13a which forms a support for the spool 5, page 8 lines 10 - 11. The support 13, and particular the collar 13a, prevent the spool 5 from moving downward in the embodiment of Fig. 1. A spring 17 biases the stop component/support 13 against the housing 3, page 8 lines 11 - 12. The other end of the spring 17 is forced against the knob 21 which is retained by the journal 9, that screws onto the threaded portion 7c of the hub 7, page 8.

During normal operation, all of the components in the cutting head are rotationally fixed together and rotate as one unit. During the cutting of the grass, the cutting line F becomes

worn and needs to be replaced. In the embodiment of Fig. 1, the cutting line is replaced by tapping the cutting head against the ground. This causes knob 21 to move upwards in Fig. 1. This upward movement of knob 21 moves a slider 19 upwards. On the upper end of slider 19 in Fig. 1, is projection 19a. During normal operation, this projection 19a engages with a tooth or set of teeth 5b on the spool 5. When the knob 21 and slider 19 move upwards in Fig. 1, the projection 19a disengages from the tooth, or set of teeth, 5b which are arranged in the lower portion of the spool 5 in Fig. 1.

The upper portion of spool 5 also has another set of teeth 5a. When the projection 19a moves upward, it disengages from the set of teeth 5b and engages with the set of teeth 5a. Teeth 5a and 5b are circumferential offset so that the spool is allowed to move an angular increment when the projection 19a moves from the teeth 5b to the teeth 5a. Likewise when the projection 19a moves downward, the projection 19a disengages from the teeth 5a and re-engages with the teeth 5b. This then allows another angular movement of the spool 5 with respect to the rest of the cutting head. When the head is rotating, the centrifugal force creates this angular incremental rotation of the spool 5 and allows more cutting line F to flow out of the spool. This then replenishes the cutting line which has become worn.

The spool 5 can hold a large quantity of cutting line F. Therefore the cutting head can be tapped against the ground many times to feed out fresh cutting line F before the spool 5 becomes empty. However, the spool 5 will eventually run out of cutting line after continued operation. New cutting line F then needs to be added to the cutting head so that the cutting head can continue operation. In the present invention, it is desirable to wind new cutting line

F on to the old spool 5. This allows the cutting line F to be bought in bulk, which lowers the cost of operation of the present invention.

Applicant has found that the process of winding cutting line on to spools in the cutting heads of the prior art can be very difficult. In the prior art cutting heads, the spool needs to be removed from the housing. The cutting line is then wound on to the spool and the spool is replaced in the housing. Because of the stiffness of the cutting line, the cutting line very often wants to become unwound from the spool. Therefore the operator must hold the cutting line on the spool while the spool is placed in the housing. If the operator slips, or needs to let go of the cutting line, the cutting line unravels from the spool by itself, and the operator must then again rewind the line. It is desirable for the spool to hold a large amount of line, and therefore it is very frustrating when the line unravels by itself and needs to be rewound.

Because many of the prior art cutting heads also have spring loaded knobs for feeding out new line, reinstalling a spool is difficult. The spool needs to be placed into the housing, and then all of the remaining components need to be reassembled, where many of those components are under spring tension during the reassembly process. If the operator lets go of the tensioned parts, the spring force will cause those tensioned parts to fly apart and the reassembly process must be started all over again, page 2 lines 7 - 14.

The present invention overcomes these problems by providing structure so that the spool can be rewound with new cutting line F while the spool is still in the housing. This rewinding is performed in the embodiment of Fig. 1 by removing the cover 25. New cutting line F is then passed through the bushings 4, and the operator can see the new line inside the

spool 5 through slot C. This rewinding of the line F is more easily seen in Figs. 2a and 2b. After the line F is fed through the bushings 4, and the line enters the spool 5, the line F is led out of the slot C so that the operator can hold the end of the line Fx. The operator then takes the end of the line Fx and inserts it into the anchor 5D. The operator then rotates the spool 5 in the winding direction so that the line F is wound onto the spool 5.

During this winding operation, the projection 19a is engaged with one of the sets of teeth 5a or 5b. While it may be possible to rotate the spool incrementally by moving the projection 19a, this would be very time consuming. Therefore in the present invention rotation of the spool in the winding direction with respect to the housing is permitted by the teeth 29 between the support 13 and the housing 3. These teeth 29 allow rotation of the spool in the winding direction, but not in the unwinding direction. Rotation of the spool in the unwinding direction is permitted between the spool 5 and the support 13 by the centrifugal force of the line F and the movement of projection 19a between the sets of teeth 5b and 5a. The operator of the present invention therefore does not need to remove the spool from the head in order to rewind line on to the spool. Page 10 lines 13 - 17.

VI. CONCISE STATEMENT OF ALL ISSUES PRESENTED FOR REVIEW

(1) Whether claims 41 - 56 and 77 - 80 are unpatentable under 35 USC § 103 as being obvious over Fabrizio in view of Baba.

VII. GROUPING OF CLAIMS

In this Appeal, claims 41, 44, 46, 49 - 51 and 53 - 56 are considered to stand and fall together. Claims 43 and 45 are also considered to stand and fall together. Applicant asserts that each of the remaining claims rejected under 35 USC § 103 as being obvious over Fabrizio in view of Baba, are separately patent able.

VIII. ARGUMENT

Whether claims 41 - 56 and 77 - 80 are unpatentable under 35 USC § 103 as being obvious over Fabrizio in view of Baba.

Claim 41 sets forth a housing and a spool placed in the housing, which in the embodiment of Fig. 1 is represented by reference 5 and 3 respectively. The spool 5 is set forth as including an anchor, which in the embodiment of the figures is represented by reference 5D, especially as seen in Figs. 1 and 2B. The anchors 5D are set forth in claim 41 as being arranged to be accessible from outside the housing to enable the line to be connected to the anchor 5D without taking the spool out of the housing. In the embodiment of Fig. 1, the anchor is arranged relative to a slot 5C so that the anchor is accessible once the cover 25 is removed and the line can be connected to the anchor 5D while the spool 5 is still in the housing 3. Applicant notes that while the embodiment of Fig. 1 preferable has a slot 5C and a cover 25, other arrangements of the anchor 5D are possible so that the anchor is accessible from outside the housing to enable the line to be connected to the anchor without taking the spool out of the housing.

The rejection of claim 41 appears to indicate that Fabrizio has every feature of claim 41 except for the anchor. The Examiner takes official notice that such anchors are old and well known in the art and provide the well known benefit of providing a fastening point for a cutting line. The rejection further states that such anchors are often located in the cutting line receiving portion of the spool. The reference of Baba is used to disclose one example of such an anchor configuration. In particular the rejection refers to the upper right occurrence of numeral 27 in component 6 of Fig. 2.

Applicant has reviewed Baba, and finds Baba to disclose an engaging projection 27. In particular Baba discloses two elements 27, namely one for the upper winding and one for the lower winding. Applicant's further review of Baba finds that elements 27 are to hold the cord after the cord is wound on the spool. This prevents the cord from unwinding after the cord is wound, and before the cord is inserted into the housing 1, see column 4 lines 61 - 68 and column 5 lines 11 - 33. In Baba, the nylon cord is removed from the projection 27 after the spool 6 is mounted. Baba states that the nylon cord can be removed with a finger or if the projection 27 is flexible, the nylon cord will be easily removed by pulling.

The rejection states that an anchor in the cutting line receiving area of the spool would clearly be accessible from the outside (e.g., by the cutting line itself) so that the cutting line can be fed to the outside of the housing. Applicant respectfully traverses this statement. Applicant can conceive many arrangements where an anchor can be in the receiving area of a spool and not be accessible from outside.

Applicant further notes that claim 41 sets forth that the anchor is arranged to be

accessible from outside the housing to enable the line to be connected to the anchor of the spool without taking the spool out of the housing. Applicant finds no teaching nor suggestion in Baba that element 27 is accessible from outside a housing to enable a line to be connected to an anchor of a spool without taking a spool out of a housing. Therefore the combination of Fabrizio and Baba fails to anticipate all of the features of claim 41.

Applicant further notes that the upper right occurrence of numeral 27 in component 6 of Fig. 2 of Baba is especially not accessible from outside a housing. As one can see from Fig. 2 of Baba, element 27 in the upper right of Fig. 2, would be positioned in the upper right portion of the housing 1. In the embodiment of Fig. 1 of Baba, the upper right element 27 would again be positioned in the upper right portion of element 6. This would place element 27 deep inside the housing 1, and this element 27 would not be accessible from outside a housing. It appears that such an element 27 in Baba would need to be flexible, so that a pull of the nylon cord would release the nylon cord from projection 27, and allow Baba to operate properly. Therefore the upper right element 27 is clearly not arranged to be accessible from outside a housing to enable a line to be connected, and therefore fails to anticipate all of the features of the anchor of claim 41.

Applicant acknowledges that there is another element 27 in the lower left portion of Baba. While this element 27 may be accessible from outside the housing, this lower left element 27 is not disclosed to be accessible from outside the housing to enable the line to be connected without taking element 6 out of the housing. Applicant finds no disclosure in Baba to arrange element 27 so that it is accessible from outside a housing to enable a line to be connected to an

anchor of a spool without taking the spool out of the housing. Therefore the lower left element 27 in Baba fails to anticipate all of the features of the anchor of claim 41.

Applicant also notes that the lower left element 27 in Fig. 1 of Baba is arranged so that it would be extremely difficult, if not impossible, to enable a line to be connected to element 27 without taking the spool out of the housing. Baba clearly does not suggest or motivate a person of ordinary skill in the art to arrange either of elements 27 so that a line can be connected to an anchor of the spool without taking the spool out of the housing. Therefore it would not be obvious to modify the combination of Fabrizio and Baba to suggest the invention of claim 41. Claim 41 therefore further defines over Fabrizio and Baba.

Claim 41 also sets forth a winding mechanism in the housing for rotating the spool to enable a supply of the line to be wound on to the spool. In the embodiment of Fig. 1, this winding mechanism is at least shown in part by the support component 13, and its relationship through the teeth 29 to the housing 3. The teeth 29 allow support 13 to be rotated with the spool 5 in a winding direction so that a supply of the line can be wound on to the spool.

The rejection states that a winding mechanism can be found in Fabrizio in elements 26 and the lower/outer portions of 3. Applicant has reviewed Fabrizio, and finds no teaching nor suggestion of any winding mechanism in a housing to enable supply of line 3 to be wound on to a spool. Applicant notes that element 26 in Fabrizio is a slot and that entrainment teeth 36 of Fabrizio engage in the slot or slots 26. Applicant also notes that element 36 of Fabrizio has been equated in the rejection with the feed mechanism. Furthermore, element 36 of Fabrizio passes through slot 26 to engage with the teeth 20 and 22 of Fabrizio. Elements 20 and 22 of

Fabrizio have been equated in the rejection with the feed mechanism. Therefore it appears that element 26 of Fabrizio is a part of a feed mechanism, instead of a winding mechanism as indicated in the rejection. The rejection is therefore untenable with regard to Fabrizio disclosing a winding mechanism.

It is understandable that Fabrizio would not disclose a winding mechanism, especially a winding mechanism in a housing, since in Fabrizio, the spool is to be completely removed from the housing and winding performed while the spool is outside of the housing. Likewise, Applicant finds no teaching nor suggestion of a winding mechanism in Baba. Baba also intends for the spool to be wound or the spools outside of the housing.

Since neither of the references describe a winding mechanism, the combination of the references fails to further anticipate all of the features of claim 41. Claim 41 therefore further defines over the prior art.

Applicant further notes that it is the combination of a winding mechanism and the arrangement of the anchor, which makes the present invention very easy to reload with line. Both the arrangement of the anchor and the winding mechanism, allow line to be connected to the spool and wound onto the spool without having to take the spool out of the housing. Applicant finds no teaching nor suggestion in the prior art which would lead a person of ordinary skill in the art to modify any of the components of the prior art so that line can be connected to a spool, and then wound on the spool without having to take the spool out of the housing. The present invention is therefore an improvement over the prior art.

Claim 41 also sets forth a stop connected to a housing to hold the spool in the housing

while the line is being connected to the anchor. Applicant finds no teaching nor suggestion in any of the references of a stop which is connected to a housing in such a manner that the stop will hold the spool in the housing while a line is connected to the anchor. Fabrizio does not disclose an anchor, and Baba does not disclose a stop that will hold the spool in the housing while the line is being connected to an anchor. Therefore the stop of claim 41 is further not described in the combination of the references. Claim 41 therefore further defines over the prior art.

Claim 42 sets forth that the winding mechanism rotates the spool from outside at least a portion of the housing. In the embodiment of Fig. 2A, the present invention has projections 5H which can be grasped by an operator to turn the spool from outside the housing without taking the spool out of the housing. Applicant finds no teaching nor suggestion of a winding mechanism in Fabrizio, and especially not a winding mechanism which enables an operator to rotate a spool from outside a housing without taking the spool out of the housing. Claim 42 therefore further defines over Fabrizio.

Claim 43 sets forth that the stop and the anchor are arranged spaced from each other in a radial direction of the spool. Claim 45 sets forth that the anchor is arranged radially farther outward than said stop. Applicant notes that the upper right element 27 in Fig. 2 of Baba appears to be positioned at a very close radially inward position. Even if there was a suggestion to place the upper right element 27 of Baba in Fabrizio, Applicant finds no indication that would lead a person of ordinary skill in the art to have a stop and an anchor in Fabrizio spaced from each other in a radial direction, or especially where an anchor is arranged radially farther

outward than the stop. Claims 43 and 45 therefore further define over the prior art.

Claim 47 sets forth that the feed mechanism includes a spring action member, and that the stop opposes action of the spring action member when the head is open to render the spool accessible from the outside. The rejection does not indicate what structure in Fabrizio or Baba is equated with the spring action member of claim 47. Applicant notes that Fabrizio does describe a spring 38. However element 3A of Fabrizio, which has been equated with the stop of the present invention, does not oppose an action of element 38, especially when a head is open. Therefore elements 38 and 3A of Fabrizio fail to anticipate the relationship between the spring action member and the stop of claim 47. Claim 47 therefore further defines over the prior art.

Claim 48 depends from claim 47, and sets forth further features with regard to the relationship between the stop and the spring action member. In particular claim 48 sets forth retention members that are part of the stop that act against the force of the spring action member. Since Fabrizio does not describe a stop acting against the force of a spring action member, Fabrizio cannot describe the retention members of claim 48. Claim 48 therefore further defines over the prior art.

Claim 52 depends from claim 51 and sets forth that the support has winding teeth engaging with the corresponding winding teeth on the housing portion. The winding teeth are set forth as being shaped so as to allow rotation of the support of the spool in a winding direction and prevent rotation in an opposite direction. The rejection does not indicate what structure in the prior art is equated with the winding teeth of claim 52. Applicant has reviewed

Fabrizio and Baba, and finds no teaching nor suggestion of winding teeth which are shaped so as to allow rotation of the support end of the spool in a winding direction, and prevent rotation in an opposite direction. Claim 52 therefore further defines over the prior art.

Claim 77 sets forth a winding mechanism in the housing for rotating the spool in a winding direction while the spool is in the housing and winding the cutting line onto the spool. As described previously, with regard to claim 41, Fabrizio does not teach nor suggest a winding mechanism in a housing for rotating a spool in a winding direction while the spool is in the housing and for winding the cutting line on to a spool. Instead it is quite clear that in Fabrizio, the spool is to be taken out and line is to be wound on the spool while the spool is outside of the housing. Applicant likewise finds the same intention in Baba. Therefore claim 77 defines over the prior art, since the prior art does not describe a winding mechanism.

Claim 77 also sets forth that the winding mechanism includes winding teeth rotatable with the spool and winding teeth fixed on the housing. The winding teeth are set forth as having a shape to slide passed each other when the spool is wound in the winding direction. The shape of the winding teeth are also set forth to block rotation of the spool with respect to the housing in the unwinding direction. The rejection does not indicate where these winding teeth rotatable with the spool and winding teeth fixed on the housing are found in the prior art. Applicant has reviewed the prior art, and finds no teaching nor suggestion of these winding teeth, especially having the shape set forth in claim 77. Since the prior art fails to anticipate this feature, the combination of the prior art cannot cause the claim 77 to be obvious. Claim 77 therefore further defines over the prior art.

Claim 78 sets forth that the spool has projections to facilitate rotation of the spool by hand in the housing in order to cause the supply of line to be wound up. The rejection does not indicate where these projections can be found in the prior art. Applicant has reviewed the prior art, and finds no teaching nor suggestion of these projections. It is understandable that the prior art would not have such projections, since the prior art does not rotate the spool by hand in the housing in order to cause the supply of line to be wound up. Claim 78 therefore further defines over the prior art.

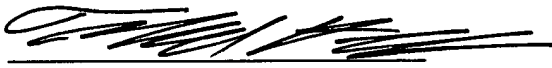
Claim 79 sets forth that the feed mechanism bypasses the winding mechanism to feed cutting line off of the spool. The winding mechanism has been previously set forth as blocking rotation in the unwinding direction. The feed mechanism bypasses this blocking of rotation in the unwinding direction, so that the line can be fed off of the spool, especially when the knob 21 is pressed against the ground. The rejection does not indicate where any feed mechanism in the prior art bypasses a winding mechanism to feed cutting line off of a spool. Applicant finds no teaching nor suggestion of such a feed mechanism, and therefore claim 79 further defines over the prior art.

Claim 80 sets forth that the stop and the winding mechanism share common structure, and that the winding mechanism forms a rotatable connection between the spool and the housing. Claim 80 also sets forth further features with regard to the winding teeth. As described previously, either Fabrizio nor Baba describe a winding mechanism, or winding teeth. Therefore it is quite clear that Fabrizio and Baba cannot describe a stop and a winding mechanism which share common structure, form a rotatable connection, or further describe

winding teeth. Claim 80 therefore further defines over the prior art.

For all of the above reasons, Applicant respectfully requests that the Board overrule the Examiner and allow each of the claims.


Respectfully submitted
For Applicant,

By: 
Theobald Dengler
Reg. No. 34,575

TD:tf

63286RCE.14

Enclosed: Appendix - Claims
Duplicate Copies of Appeal Brief
Request to Charge Deposit Account

DATED: March ²³~~22~~, 2004 
SCARBOROUGH STATION
SCARBOROUGH, NEW YORK 10510-0827
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McGLEW AND TUTTLE, P.C.

BY:  DATE: March 23, 2004

APPENDIX

1. - 40. (Canceled)

41. (Previously presented) A grass-cutting head with a line, the head comprising:
a housing;

at least one spool placed in said housing and on which a line can be wound, said spool
including an anchor for holding an end of the line, said anchor being arranged to be accessible
5 to an operator from outside said housing to enable the end of the line to be connected to said
anchor of said spool without taking said spool out of said housing;

a feed mechanism in said housing for feeding the line from said spool;

a winding mechanism in said housing for rotating said spool to enable a supply of the
line to be wound onto said spool;

10 a stop connected to said housing to hold said spool in said housing while the line is
being connected to said anchor, said stop and said anchor being arranged and sized to have said
anchor be accessible.

42. (Previously presented) A grass-cutting head in accordance with claim 41, wherein:

said winding mechanism rotates said spool from outside at least a portion of said
housing without taking said spool out of said housing;

said stop holds said spool in said housing while said supply of line is being wound onto
5 said spool.

43. (Previously presented) A grass-cutting head in accordance with claim 41, wherein:
said stop and said anchor are arranged spaced from each other in a radial direction of
said spool.

44. (Previously presented) A grass-cutting head in accordance with claim 41, wherein:
said spool defines a center opening;
said stop and said housing connect to each other through said center opening of said
spool;
said stop extends radially outward farther than said center opening of said spool.

45. (Previously presented) A grass-cutting head in accordance with claim 44, wherein:
said anchor is arranged radially farther outward than said stop.

46. (Previously presented) A grass-cutting head in accordance with claim 41, wherein:
said anchor defines a line receiving hole opening in an axial direction of said spool.

47. (Previously presented) A grass-cutting head in accordance with claim 41, wherein:
said feed mechanism includes a spring-action member;
said stop opposes action of said spring-action member when the head is opened to
render said spool accessible from the outside;

said spool defines access slots providing access to said anchors.

48. (Previously presented) A grass-cutting head in accordance with claim 47, wherein:
said stop includes retention members that act against the force of said spring-action member, preventing said spring action member from escaping from the housing when the housing is open to enable said supply of cutting line to be wound onto the spool;

5 said stop includes a support connected to said housing, said support rotatably holding said spool between said housing and said support;

an annular cover is connected to said housing and covers a side of said spool diametrically opposite said housing, said annular cover covers said access slots.

49. (Previously presented) A grass-cutting head in accordance with claim 41, wherein:
said feed mechanism comprises in combination an actuating slider, a first series of feeding teeth integral with said spool and a second series of feeding teeth integral with said spool, feed teeth of the first series engaging with a first feed stop or group of feed stops rotationally fixed to said housing and feed teeth of the second series engaging with a second feed stop or group of feed stops rotationally fixed to said housing, positions of arrest of said spool defined by the first series of feed teeth and by the first feed stop or group of feed stops being angularly offset relative to positions of arrest of said spool defined by the second series of feed teeth and by the second feed stop or group of feed stops;

10 and movement of said actuating slider causes an axial movement of the spool between two positions to bring the feed teeth of the first series or the feed teeth of the second series alternately into engagement with their respective feed stops, the spring-action member exerting

a force on the spool.

50. (Previously presented) A grass-cutting head in accordance with claim 49, wherein:
said housing includes a housing portion through which extends an axial hub of a rotary
drive, and said spool being placed around said housing portion;

5 said stop includes a support connected to said housing, said support rotatably holding
said spool between said housing and said support, said support defining axially elongated
openings;

said first feed stop and said second feed stop are connected to said actuating slider, said
first and second feed stops pass through said axially elongate openings in said support and
engage with said feed teeth on the spool; and

10 an annular cover closes said housing and extends around the support for said spool.

51. (Previously presented) A grass-cutting head in accordance with claim 50, wherein:
said support has winding teeth engaging with corresponding winding teeth on said
housing portion.

52. (Previously presented) A grass-cutting head in accordance with claim 51, wherein:
said winding teeth are shaped so as to allow rotation of the support and of the spool in
a winding direction and prevent rotation in an opposite direction.

53. (Previously presented) A grass-cutting head in accordance with claim 50, wherein:
said support for said spool has a cylindrical wall around which the spool is placed and
said support also includes a supporting collar supporting said spool.

54. (Previously presented) A grass-cutting head in accordance with claim 53, wherein:
said support has a cylindrical support in which said actuating slider moves, the actuating
slider being elastically pressed by said spring-action member.

55. (Previously presented) A grass-cutting head in accordance with claim 53, wherein:
a generally cylindrical closing wall extends from said supporting collar, said annular
cover is mounted on said cylindrical closing wall.

56. (Previously presented) A grass-cutting head in accordance with claim 55, wherein:
a circular skirt defines a circumferential wall of the housing, said annular cover has an
edge that embraces said circular skirt.

77. (Previously presented) A cutting head comprising:

a housing:

a spool rotatably mounted in said housing for winding cutting line on said spool;

a feed mechanism in said housing for rotating said spool in an unwinding direction in

said housing and feeding the cutting line off of said spool;

a winding mechanism in said housing for rotating said spool in a winding direction while said spool is in said housing and winding the cutting line onto said spool, said winding mechanism including winding teeth rotatable with said spool and winding teeth fixed on said housing, said winding teeth having a shape to slide past each other when said spool is wound in said winding direction, said shape of said winding teeth blocking rotation of said spool with respect to said housing in said unwinding direction;

a stop connected to said housing and blocking separation of said spool from said housing during winding of the cutting line by said winding mechanism, said stop including a support connected to said housing, said support rotatably holding said spool between said housing and said support.

78. (Previously presented) A head in accordance with claim 77, wherein:

said spool has projections to facilitate rotation of the spool by hand in the housing in order to cause the supply of line to be wound up.

79. (Previously presented) A head in accordance with claim 77, wherein:

said feed mechanism bypasses said winding mechanism to feed the cutting line off said spool.

80. (Previously presented) A head in accordance with claim 77, wherein:

said stop and said winding mechanism share common structure;

said winding mechanism forms a rotatable connection between said spool and said housing, said winding teeth rotatable with the housing being on a housing side of said rotatable connection, and said winding teeth rotatable with said spool being on a spool side of said rotatable connection.

ATTORNEY DOCKET NO: 63286RCE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : ARNETOLI
Serial No : 09/348,069
Confirm. No : 4721
Filed : July 6, 1999
For : GRASS-CUTTING...
Art Unit : 3724
Examiner : C. Dexter
Dated : March 23, 2004

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST TO CHARGE DEPOSIT ACCOUNT

In the above matter The United States Patent and Trademark Office is hereby requested
to charge deposit account 13-0410 as follows:

\$165.00 for filing a brief in support of an appeal under fee code 2402.

Respectfully submitted
for Applicant,

By: 

Theobald Dengler
Registration No. 34,575
McGLEW AND TUTTLE, P.C.

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63286RCE.15

DATED: March 23, 2004
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SHOULD ANY OTHER FEE BE REQUIRED, THE PATENT AND TRADEMARK OFFICE IS HEREBY REQUESTED TO CHARGE SUCH FEE TO OUR DEPOSIT ACCOUNT 13-0410.

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BY: Christina Forte DATE: March 23, 2004